

ABSTRACT OF THE DISCLOSURE

A method of forming integrated circuitry includes forming a silicon nitride comprising layer over a semiconductor substrate. At least a portion of the silicon nitride comprising layer is etched using an etching chemistry comprising ammonia and at least one fluorocarbon. A method of forming shallow trench isolation in a semiconductor substrate includes depositing a silicon nitride comprising layer over a bulk semiconductor substrate. A photoresist comprising masking layer is formed over the silicon nitride comprising layer. The photoresist comprising masking layer is patterned effective to form a plurality of shallow trench mask openings therethrough. The silicon nitride comprising layer is etched through the mask openings substantially selectively relative to the photoresist using an etching chemistry comprising ammonia and at least one fluorocarbon.

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